

Prerequisites: This course shall have no formal pre-requisite.

Course Length: 8 hours

Course Objectives:

- Delegates will gain an awareness of the hazards encountered when working on oil & gas installations and the systems in place to control and mitigate those hazards.
- Identify main hazards, their risk, control, and consequences.
- Potential environmental impact of oil & gas operations.
- Identify key safety regulations and explain the concept of these regulations.
- Principles of managing safety on oil & gas installations.
- Alcohol and substance abuse policy.
- PPE requirements on oil & gas installations.
- Procedures for reporting incidents, accidents and near misses.

Course Design

- Narrated e-learning modules

Successful Course Completion

- Requires a minimum score of 80% or better on knowledge assessment.

Course Outline

Module 1: Core Curriculum

1.1 General Safety

- Regulatory Requirements
 - United States Coast Guard
 - Bureau of Safety and Environmental Enforcement
- SEMS
 - Overview
 - Management of Change
 - Responsibility
- Principles
 - Lead Through Example
- Alcohol and Drug Policies
 - Government Regulations
 - Laws and Drug Testing
 - Reasonable Suspicion
 - Common drugs and their symptoms
 - Searches and Seizures
 - Reporting of Medications
- Firearms, Weapons and Other Prohibited Items
- Personal Conduct
 - Smoking Restrictions

- Personal Hygiene
 - Workplace Violence
 - Zero Tolerance & Responsibility to report
- General Worksite Safety
 - Behavior-based Safety
 - Overview
 - Roles and Responsibilities
 - Intervention / Stop Work
 - Overview
 - SWA Process and Management Support
 - Stop Work Situations
 - Job Safety Analysis
 - Elements
 - Pre-written JSAs
 - Pre-job Planning Meeting
 - Simultaneous Operations and Communication
 - Differing Operator/Contactor Rules
- Hand & Power Tool Safety
 - General Safety Rules
 - Taking a Hand Tool Out of Service
 - Use the Proper Tool for the Task
 - Proper Handling
 - Properly Using Power Tools
- Electrical Safety
 - Hazards of Electricity
 - Effects of Electrical Shock
 - Training & Qualifications
- Housekeeping
 - Importance of Housekeeping
 - Common housekeeping duties
 - Proper Storage of Waste
 - Walkways/Aisles/Trip Hazards
 - Spills
 - Signs and Barricades
 - Cones and other barriers
 - Signs on Location – colors and symbols
- Walking Working Surfaces
 - Overview
 - Guarding Floor and Wall Openings and Holes
 - Guardrail System
 - Floor Hole, floor opening, wall opening, Ladder-way floor opening, stairway floor opening
 - Stairways/Handrails

- Scaffold safety
 - Fixed ladders
 - Portable ladders
 - General Safety
- Workplace Incidents
 - Types of Incidents: accidents, first aid, near miss
 - Causes of Incidents
 - Reporting Incidents
 - Reporting and Anti-retaliation
 - Vehicle Accidents
 - Incident investigation Purpose and responsibilities
- Land Transportation
 - Overview
 - Certificates/Endorsements
 - Vehicle Condition
 - Inspection & Load Security
 - Driving Practices
 - Hazards of Driving
 - Prohibited actions
 - Fatigue Management
 - Best Driving Practices
 - Coordinates, airbags, cellphones
- Human Factors (IOGP)
 - Principles of Human Behavior
 - Common Biases
- Line of Fire
 - Overview
 - Controls

1.2 Personal Protection Equipment

- Mitigate, Control, Protect
- Determining PPE: Hazard Assessment, Orientation, Uncertainty
- Types, Care & Use, and Inspection
 - Specialty Protective Clothing
 - Head Protection
 - Eye and Face Protection
 - Hearing Protection
 - Foot Protection
 - Hand Protection
 - Causes of hand injury
 - Respiratory Protection
 - APR vs SAR
 - Fit Tests

- Fall Protection
 - Fall Prevention vs Fall Arrest
 - Personal Fall Arrest System
 - Fall Protection height requirements
- Limitations of PPE

1.3 Hazard Communication

- Chemical Hazards and Inventory
- Container Labeling
- Globally Harmonized System
 - Benefits
 - GHS labels
 - Pictograms
- Safety Data Sheets
- Hazardous Materials Transport
 - DOT Requirements
 - Marking & Labeling Packages
 - Placarding
- Hazardous Materials Release
 - Dangers of responding
 - Responsibilities
 - Emergency Response Guidebook

1.4 Occupational Health

- Workplace Health Risks
- Employee Responsibilities
- Exposure to Health Hazards
- Health Hazards at the Worksite
 - Hydrogen Sulfide
 - Emergency Response
 - H2S Incidents
 - Crystalline Silica
 - Diesel mist

1.5 Specialized Work Procedures

- Hazardous Energy
 - Definitions
 - Types of hazardous energy
 - De-energized equipment
 - Verification
- Lockout/Tagout
 - Overview
 - Forms of Energy Isolation
 - Roles and Responsibilities
 - Training

- Energy Control Procedures
 - Use of locks and tags
- Work Permits
 - Overview
 - Types
 - Responsibilities
- Work Authorization
 - Types
 - Safety Controls
- Confined Space
 - Examples
 - Permit Required Confined Space
 - Breaking the plane
 - Hazards
 - Roles and Responsibilities
- Hot Work
 - Overview
 - Sources of Ignition
 - Safeguards
- Working at Heights
 - Overview & Equipment
 - Level of Training
 - Prevention of Dropped Objects
 - Guard Rails
 - Permanent vs. Temporary
 - Rescue Plan
 - Personnel Hoisting

1.6 Fire Safety

- Fire Tetrahedron
- General Prevention
- Ignition Sources
- 5 Classes of Fire
- Types of Fire Extinguishers
- Responsibilities
- Emergency Evacuation

1.7 Materials Handling

- Mechanical Equipment
 - Communications
 - Effective Communication
 - Hazards & Barriers
 - Electrical hazards
- Manual Materials Handling

- **Discussion:** Importance of Proper Lifting
- Manual Lifting Injuries
- Alternatives to Lifting
- Have a Plan

1.8 Health & First Aid

- General Information
 - Common Workplace Illnesses/Injuries
 - Bloodborne Pathogen Exposure
 - Protection from Bloodborne Pathogens
 - Decontamination
- Health & Adverse Weather
 - Possible Conditions
 - Thermal stress
 - Reducing Heat Stress

1.9 Rig & Platform Environment

- Arrival Procedures
 - Safety Orientation
- Home Away from Home
- Site Specific Information
 - Station Bill
- Active Shooter
- High Pressure
- Alarms
 - Response to Alarms

1.10 Wellsite Environmental Protection

- Waste Management
 - Waste Minimization
- Leaks, Spills, Releases
 - Reporting & Responding
 - Containment

Module 2.0 Onshore Supplement

- **The Oil and Gas Value Chain**
- Excavation – Trenching & Shoring
 - Regulatory Requirements
 - Worker Responsibilities
 - Safe Practices for Excavations
 - Training
 - Excavation/Trenching Hazards
 - Protective Systems
 - PPE
 - Hazardous Atmospheres

- Access, Egress, & Rescue
- Short Services Employees
- Pits and Ponds
 - Types
 - Hazards of Pits and Ponds
 - Safety Precautions

Module 3.0 Offshore Supplement

- Transportation
 - Arrival at Shore Base
 - Helicopter Transportation
 - Danger Zones
 - Boat Transportation
 - Station Bill
 - Swing Ropes
 - Personnel Basket
 - Arriving Offshore
- Offshore Expectations
 - Living Quarters, Galley, Medical Facilities, Recreational areas
 - Banned Items
 - PPE
 - Effects of Weather
- Water Safety
 - Prepare for Emergencies
 - Escape Routes
 - Types of Personal Flotation Devices
 - Survival Crafts
 - Life Raft
 - Life Floats
 - TEMPSC
 - Marine Resources
 - Man-Overboard Response
- Marine Debris
 - Overview
 - Responsibilities
- Conclusion

Reference Material / Documents

BSEE 30 CFR 250.109 – 250.113	OSHA 29 CFR 1910.151 OSHA 29 CFR 1910.157	OSHA 29 CFR 1926.200 OSHA 29 CFR 1926.500-503
BSEE 30 CFR 250.490	OSHA 29 CFR 1910.242	OSHA 29 CFR 1926.1101
OSHA 29 CFR 1904.35	OSHA 29 CFR 1910.333	OSHA 29 CFR 1926.12
OSHA 29 CFR 1910.22	OSHA 29 CFR 1910.1001	DOT 49 CFR 171-179
OSHA 29 CFR 1910.95	OSHA 29 CFR 1910.1020	Environmental Protection Agency (EPA)
OSHA 29 CFR 1910.101	OSHA 29 CFR 1910.1030	National Fire Protection Association Codes and Standards
OSHA 29 CFR 1910.120	OSHA 29 CFR 1910.1060	Offshore Operators Committee
OSHA 29 CFR 1910.132-133	OSHA 29 CFR 1910.1200	
OSHA 29 CFR 1910.134	OSHA 29 CFR 1910 Subpart E	
OSHA 29 CFR 910.138	OSHA 29 CFR 1910 Subpart Z	
OSHA 29 CFR 1910.145	OSHA 29 CFR 1926.50	
OSHA 29 CFR 1910.146	OSHA 29 CFR 1926.101	
OSHA 29 CFR 1910.150	OSHA 29 CFR 1926.150	